

Application No.: 10/789,206
Attorney Docket No.: 25238B

Remarks

The features of claim 5 have been incorporated into claim 1 and claim 5 has been canceled accordingly. Support for the additional amendments to claim 1 is found at least in paragraph [0018]. Claim 6 has been amended to change the dependency of the claim. Support for the above requested amendments to claim 11 is found at least in paragraphs [0007], [0016], and [0018]. Claims 10 and 12 have been amended to remove the recitation of a silane coupling agent to avoid redundancy. Claims 6 and 14 have been amended to recite "organosilane coupling agent" to correspond to claims 1 and 11 respectively. Support for the amendments to claim 18 is found at least in paragraph [0018]. Claims 2 and 20-21 were canceled without prejudice in previous Amendments. At least claims 6, 10, 12, and 14 have been amended for reasons not related to patentability. Newly added claim 22 is supported at least by paragraphs [0007], [0012]-[0016], and [0018]. Support for new claim 23 is found at least in paragraph [0017]. New claim 24 is supported at least by paragraphs [0014]-[0016]. New claim 25 is supported at least by paragraph [0014].

No question of new matter arises and entry of the above-requested amendments and new claims is respectfully requested.

Claims 1, 3-4, 6-19, and 22-25 are before the Examiner for consideration.

Formal Matter

As shown above, Applicants have added new claims 22-25 by amendment (*i.e.*, four claims). Additionally, claims 2, 5, 20, and 21 (*i.e.*, four claims) have been canceled without prejudice. Because the total number of claims Applicants are submitting for examination (*i.e.*, twenty-one claims) is not greater than the total number of claims previously presented and paid for (*i.e.*, twenty-one claims), Applicants respectfully submit that no additional filing fees are required for newly added claims 22-25.

In addition, Applicants respectfully submit that there are no fees required for new independent claim 22 because the total number of independent claims present in the application (*i.e.*, four independent claims) does not exceed the total amount of independent claims previously presented and paid for (*i.e.*, four independent claims). Furthermore, because support for newly added claims 22-25 is found throughout the specification, as identified in the opening paragraph of the Remarks, Applicants respectfully submit that these newly added claims do not contain any new matter.

Application No.: 10/789,206
Attorney Docket No.: 25238B

Rejection under 35 U.S.C. 112, second paragraph

Claims 1 and 3-19 have been rejected under 35 U.S.C. §112, second paragraph, as being indefinite. In particular, the Examiner asserts that it is not clear if the amounts of the components are defined in terms of a total solids basis or an aqueous basis. In addition, the Examiner asserts that the claimed percentages do not add up to 100%. Additionally, the Examiner asserts that it is not clear if there are other components in the sizing composition or if the balance is water. Accordingly, it is concluded that the metes and bounds for which patent protection is being sought is not clear.

Initially, Applicants submit that claim 5 has been canceled without prejudice, thereby rendering the rejection of this claim moot.

In response to this rejection, Applicants have amended independent claims 1, 11, and 18 to recite that the sizing composition is an aqueous sizing composition and to include water in an amount sufficient to achieve a desired ratio of solids. Applicants submit that amended claims 1, 3, 4, and 6-19 are sufficiently definite and respectfully request that this rejection be reconsidered and withdrawn.

Rejection under 35 U.S.C. §103(a)

Claims 1, 3, 7-9, 11, and 13-16 have been rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,482,400 to Collin ("Collin"). The Examiner asserts that Collin discloses a coating composition having 0.01-60% by weight of a polyether based polyurethane, 0-15% by weight of a film forming polymer, 0.01-20% by weight of a cationic lubricant, and 0.1-20% by weight of a non-ionic lubricant. The Examiner admits that Collin does not teach the inclusion of a silane coupling agent. However, the Examiner asserts that Collin does disclose that cohesion agents can be added. The Examiner concludes that it would have been obvious to one of skill in the art to modify the composition of Collin to include a silane coupling agent in the amounts claimed in claim 1 to promote adhesion of the filler materials to the base materials.

Additionally, the Examiner asserts that, with respect to the composition being compatible with a phenolic pultrusion process, Collin teaches a substantially similar composition that would necessarily have the same properties. Regarding the preamble language "sizing composition", the Examiner asserts that the language is drawn to the future

Application No.: 10/789,206
Attorney Docket No.: 25238B

intended use of the composition and does not serve to distinguish the present invention over Collin.

Independent Claim 1:

With respect to independent claim 1, Applicants respectfully direct the Examiner's attention to independent claim 1 and submit that claim 1, as amended, defines a sizing composition that is neither taught nor suggested by Collin. In particular, Applicants have amended claim 1 to include the recitation of claim 5 (*i.e.*, that the silane coupling agent is an organosilane coupling agent), which was not included in this rejection. Accordingly, Applicants submit that amended claim 1 is not taught or suggested by Collin and respectfully request that the Examiner reconsider and withdraw this rejection.

Notwithstanding the above, Applicants respectfully submit that Collin does not teach or suggest a sizing composition that includes a coupling agent, particularly an organosilane coupling agent. Collin is directed to a cosmetic composition for application to keratin fibers (*i.e.*, eyelashes). (*See, e.g.*, column 1, lines 39-40 and 48-50). There is simply no teaching or suggestion within the four corners of Collin to add a silane coupling agent of any kind to the cosmetic composition or of a sizing composition for glass fibers as claimed in claim 1. In fact, Collin is silent with respect to any teaching or suggestion of a coupling agent or of glass fibers. Therefore, it is respectfully submitted that Collin does not teach or suggest Applicants' invention as recited in amended independent claim 1.

Additionally, Applicants submit that there is no motivation for one of skill in the art to arrive at the sizing composition claimed in claim 1 based on the disclosure of Collin. To establish a *prima facie* case of obviousness, there must be some motivation, either within the reference or in the knowledge of those of skill in the art, to modify the reference or combine the references' teachings, there must be a reasonable expectation of success, and the prior art references must meet all of the claim limitations. (*See, e.g., Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2142). It is respectfully submitted that one of ordinary skill in the art would not be motivated to arrive at a sizing composition that includes an organosilane coupling agent based on the teachings of Collin because Collin is silent with respect to any teaching or suggestion of a coupling agent. Accordingly, one of ordinary skill in the art would have no motivation to include an organosilane coupling agent in the sizing composition for a phenolic pultrusion process based

Application No.: 10/789,206
Attorney Docket No.: 25238B

on the teachings of Collin. Without some teaching or suggestion, there can be no motivation, and without motivation, there can be no *prima facie* case of obviousness.

Further, Applicants submit that Collin is non-analogous art. According to §2141.01(a) of the Manual of Patent Examiner Procedure, “[i]n order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned.” (See *Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2141.01(a) citing *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992)). Applicants respectfully submit that problems associated with mascara have nothing to do with problems associated with glass fiber sizing compositions for use in a phenolic pultrusion process. It is respectfully submitted that one of skill in the art would not look to the teachings of Collin to arrive at the present glass sizing compositions. Therefore, it is respectfully submitted that Collin does not teach or suggest Applicants' invention as recited in claim 1.

In view of the above, it is respectfully submitted that independent claim 1 is not taught or suggested by Collin, and that claim 1 is therefore non-obvious and patentable. With respect to dependent claims 3 and 7-9, Applicants submit that because independent claim 1 is not taught or suggested by Collin and because claims 3 and 7-9 are dependent upon claim 1 and contain the same elements as claim 1, dependent claims 3 and 7-9 are also not taught or suggested by Collin.

Independent Claim 11:

With respect to independent claim 11, Applicants respectfully direct the Examiner's attention to independent claim 11 and submit that claim 11, as amended, defines a method of making a sizing composition that is compatible with a phenolic pultrusion process that is neither taught nor suggested by Collin. In particular, Applicants have amended claim 11 to recite “an organosilane coupling agent”. This feature was claimed in claim 5, which was not included in any of the art rejections. In order to avoid redundancy, Applicants have removed this feature from claim 12. Accordingly, Applicants submit that amended claim 11 is not taught or suggested by Collin and respectfully request that this rejection be reconsidered and withdrawn.

Notwithstanding the above, Applicants submit that Collin does not teach a method of making a sizing composition that includes admixing a polyamide film former, an

Application No.: 10/789,206
Attorney Docket No.: 25238B

organosilane coupling agent, a non-ionic lubricant, a cationic lubricant, and, optionally, a polyether based polyurethane solution to form an admixture. There is no teaching or suggestion within the four corners of Collin of a coupling agent, especially an organosilane coupling agent, used to form a sizing composition for glass fibers. Thus, it is respectfully submitted that Collin does not teach or suggest Applicants' invention as recited in amended independent claim 11.

Further, Applicants submit that there is no motivation for one of skill in the art to arrive at the method for making a sizing composition compatible with a phenolic pultrusion process as claimed in claim 11 based on the disclosure of Collin. As discussed above, in order to establish a *prima facie* case of obviousness, there must be some motivation to modify or combine the references' teachings. (See, e.g., *Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2142). Applicants respectfully submit that one of ordinary skill in the art simply would not be motivated to arrive at a method of making a sizing composition for a glass fiber that includes admixing an organosilane coupling agent with a polyamide film former, a non-ionic lubricant, a cationic lubricant, and, optionally, a water dispersible polyether based polyurethane solution based on the teachings of Collin because Collin is silent with respect to any teaching or suggestion of any type of coupling agent. Accordingly, one of ordinary skill in the art would have no motivation to include an organosilane coupling agent in a method of making a sizing composition for glass fibers that is compatible with a phenolic pultrusion process based on the teachings of Collin. Without some teaching or suggestion, there can be no motivation, and without motivation, there can be no *prima facie* case of obviousness.

Further, Applicants submit that Collin is non-analogous art. According to §2141.01(a) of the Manual of Patent Examiner Procedure, "[I]n order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." (See *Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2141.01(a) citing *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992)). Applicants respectfully submit that problems associated with mascara have nothing to do with problems associated with glass sizing compositions for use in a phenolic pultrusion process. It is respectfully submitted that one of skill in the art would not look to the teachings of Collin to arrive at the present glass

Application No.: 10/789,206
Attorney Docket No.: 25238B

sizing compositions. Therefore, it is respectfully submitted that Collin does not teach or suggest Applicants' invention as recited in claim 11

In view of the above, it is respectfully submitted that independent claim 11 is not taught or suggested by Collin, and that claim 11 is therefore non-obvious and patentable. With respect to dependent claims 13-16, Applicants submit that because independent claim 11 is not taught or suggested by Collin and claims 13-16 are dependent upon claim 11 and contain the same elements as claim 11, dependent claims 13-16 are also not taught or suggested by Collin.

Conclusion:

In light of the above, it is respectfully submitted that the combination of features recited in independent claims 1 and 11 are not taught or suggested by Collin. Thus, Applicants respectfully submit that claims 1 and 11, and all claims dependent therefrom, are non-obvious and patentable. Accordingly, it is respectfully requested that the Examiner reconsider and withdraw this rejection.

New Claims 22-25

Although not included in any of the outstanding rejections, Applicants wish to briefly address the patentability of newly added claims 22-25. In this regard, Applicants respectfully submit that Collin does not teach or suggest an aqueous sizing composition that includes 1.0 - 7.0 percent by weight of a polyamide film forming polymer; 0.5 - 3.0 percent by weight of a silane coupling agent; 0.5 - 3.0 percent by weight of a non-ionic lubricant; 0.2 - 3.4 percent by weight of a cationic lubricant; and water in an amount to achieve a desired ratio solids, where the sizing composition is a glass fiber sizing composition compatible with a phenolic pultrusion process as claimed in independent claim 22. There is no teaching or suggestion within Collin of a glass fiber sizing composition that is compatible with a phenolic pultrusion process. Collin teaches a cosmetic composition for coating keratin fibers such as eyelashes. (See, e.g., column 1, lines 39-40 and 48-50 and the Abstract). Collin further teaches that the composition possesses good coating, good lengthening and curling of the eyelashes, and good staying power. (See, e.g., column 1, lines 50-53 and the Abstract). It is also taught that the sizing composition (*i.e.*, mascara composition) is comfortable to wear and may be easily removed. (See, e.g., column 1, lines 53-55). Applicants respectfully submit that Collin is

Application No.: 10/789,206
Attorney Docket No.: 25238B

silent with respect to any teaching or suggestion of a sizing composition for glass fibers for use in any kind of process.

Moreover, Applicants submit that Collin is non-analogous art. According to §2141.01(a) of the Manual of Patent Examiner Procedure, "[I]n order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the inventor was concerned." (*See Manual of Patent Examining Procedure*, Patent Publishing, LLC, Eighth Ed., Rev. 3, August 2005, §2141.01(a) citing *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992)). Applicants respectfully submit that problems associated with mascara have nothing to do with problems associated with glass sizing compositions for use in a phenolic pultrusion process. It is respectfully submitted that one of skill in the art would not look to the teachings of Collin to arrive at the present glass compositions. Therefore, it is respectfully submitted that Collin does not teach or suggest Applicants' invention as recited in newly added independent claim 22. Accordingly, it is submitted that claim 22 is non-obvious and patentable. Because claims 23-25 are dependent upon claim 22 and contain the same elements as independent claim 22, it is respectfully submitted that claims 23-25 are also patentable over Collin.

Conclusion

In light of the above, Applicants believe that this application is now in condition for allowance and therefore request favorable consideration.

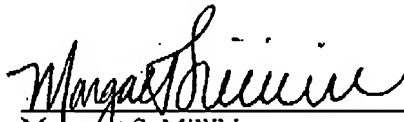
If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Application No.: 10/789,206
Attorney Docket No.: 25238B

If necessary, the Commissioner is hereby authorized to charge payment or credit any overpayment to Deposit Account No. 50-0568 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

Date: 10/22/07


Margaret S. Millikin
Registration No. 38,969

Owens Corning
Patent Department, Bldg. 21-0
2790 Columbus Road
Granville, Ohio 43023
(740) 321-5359